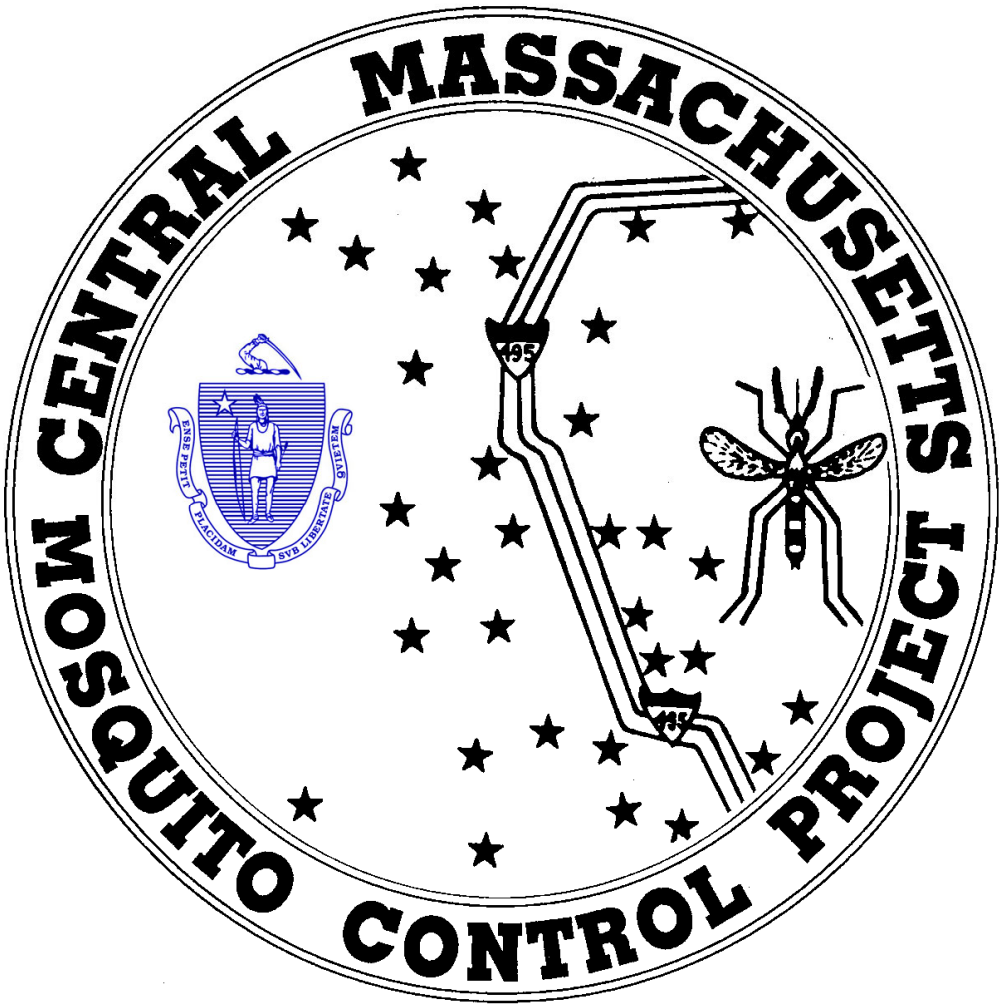
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #34
Aug. 16-22, 2020

Frank Cornine, *Staff Biologist*
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Tim McGlinchy, *Director of Operations*
Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 8/16/20-8/22/20
EPI Week #34

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	169	698	97	195	502	3342
Total Specimens	1886	32316	312	2821	3845	47694
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 69.49°F with a recorded high temperature of 91.40°F and a recorded low temperature of only 52.10°F. There was 0.13 inches of rain observed this week. Compared to the previous week, it was approximately 7.25°F cooler on average, and rained about 0.13 inches more. There has been 1.92 inches of rain accumulated in August, after 1.06 inches for the month of July.

CMMCP Mosquito Summary-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	-60.63%	+82.01%	Gardner, Marlborough
Coquillettidia perturbans	-89.83%	-80.13%	Tewksbury, Marlborough
Culiseta melanura	+50.00%	-83.27%	Stow, Webster
Ochlerotatus canadensis	-50.00%	-47.58%	Gardner, Blackstone
Culex Species	+18.45%	-72.41%	Tewksbury, Milford
All Species	-62.56%	-76.01%	Tewksbury, Westford, Milford

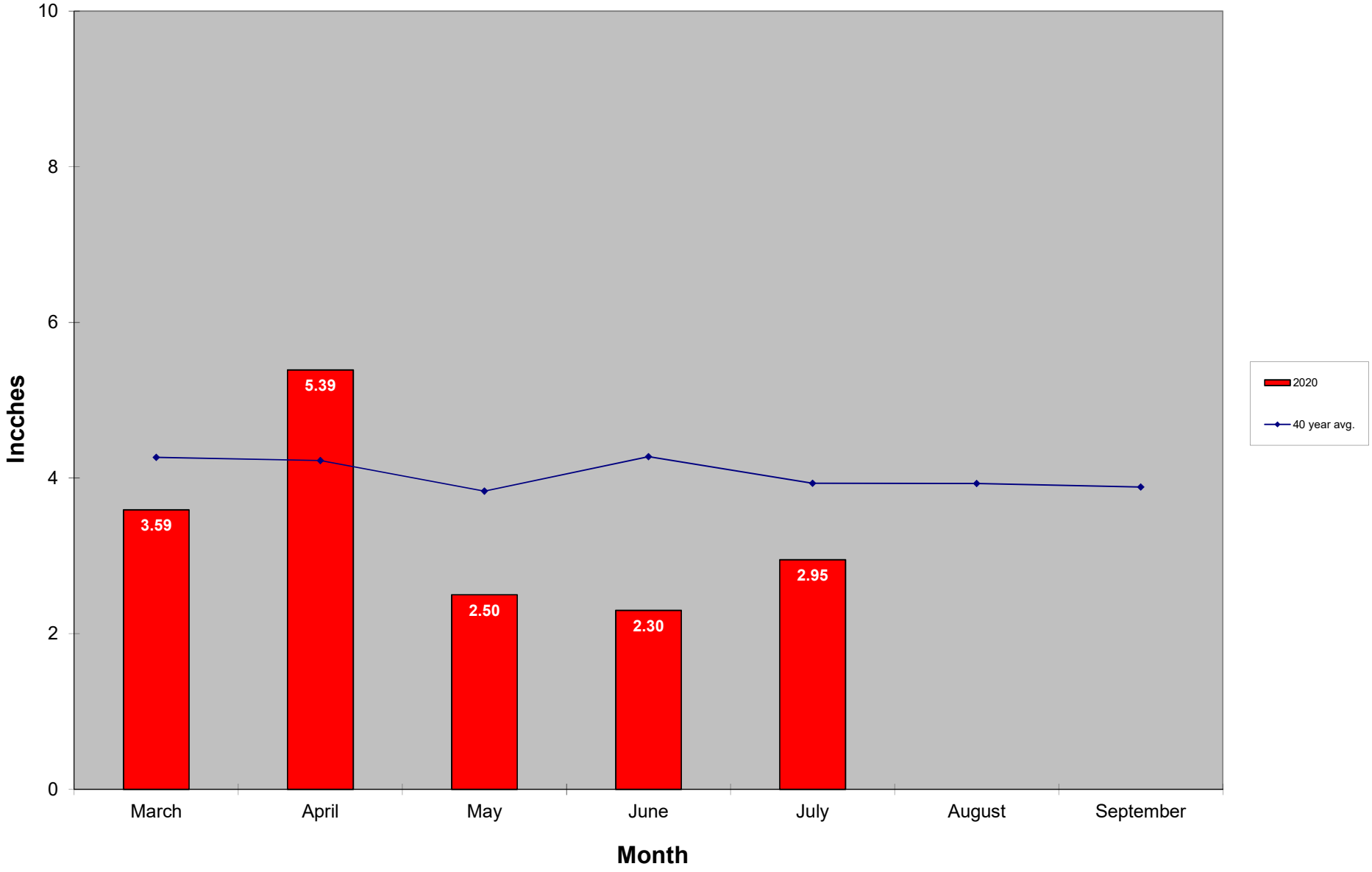
The predominant mosquito for the week was *Culex* spp.,
followed by *Coquillettidia perturbans*.

General narrative: The average temperature for EPI week 34 was approximately 7.25°F cooler than the previous week, with only 0.13 inches of precipitation observed. This week decreased emergence was observed for all target mosquitoes except for *Culiseta melanura* and *Culex spp*. The most abundant mosquito this week was *Culex spp*., followed now by *Coquillettidia perturbans*. Compared to the 2019 season, overall mosquito surveillance numbers are down this year. All target species are lower this season, except for *Aedes vexans*. Every submitted mosquito pool from EPI week 33 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps continued, with 442 eggs collected and submitted for identification this week.

Service requests are 58.9% greater than the 17-year average and an 8.8% decrease over 2019 numbers. Services requests decreased 85% over Epi week 33 numbers. Work crews are performing catch basins treatments in all member communities for *Culex*

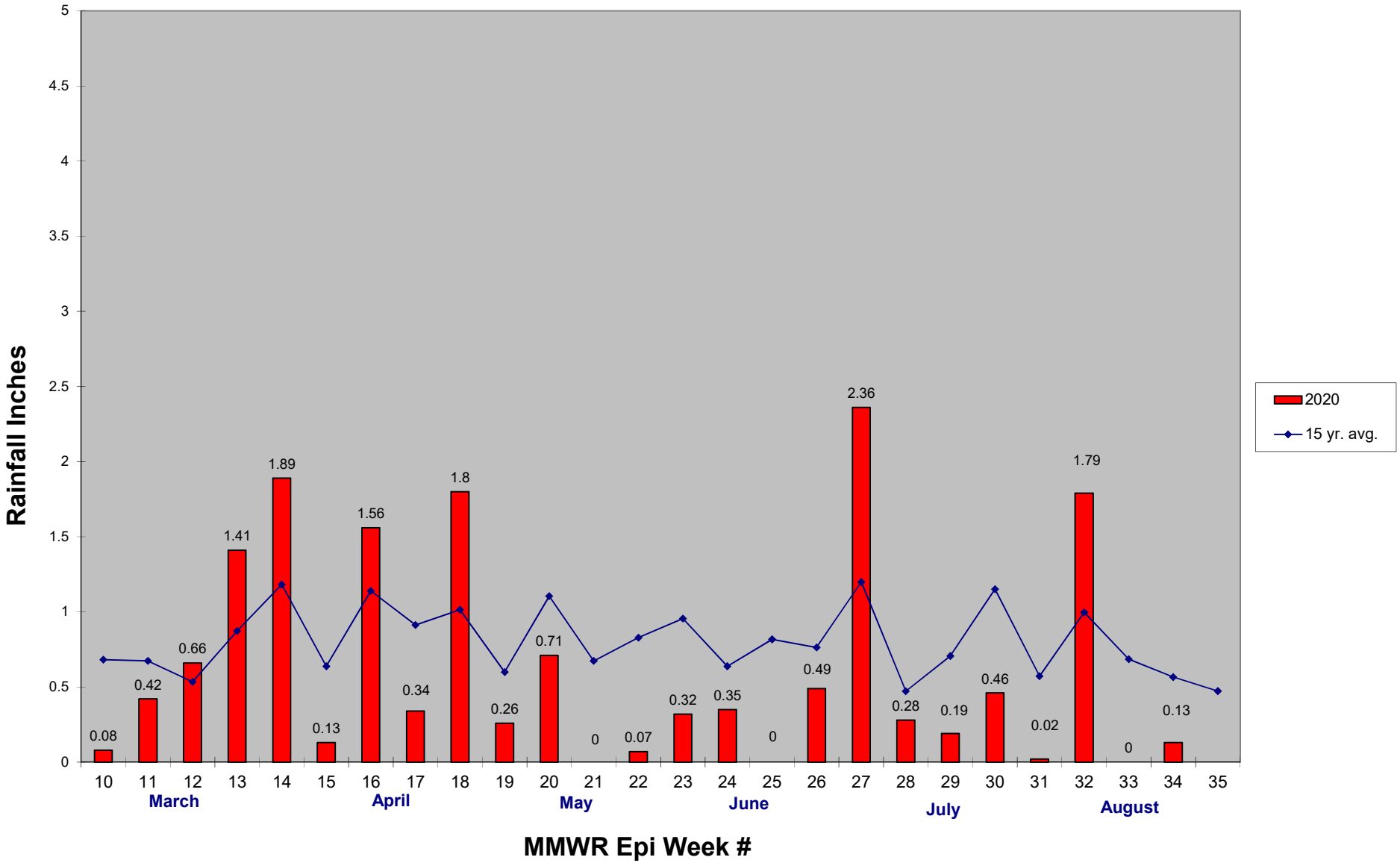
control. 5,802 catch basins were treated in Epi week 34, bringing the total for the year to 77,128 basins. Final results are still pending from the analysis laboratories but initial results do not look positive for control in most *Cs. melanura* crypt habitat. Data is still being collected and analyzed from emergence traps in *Cq. perturbans* habitat.

2020 Mass. Rainfall Data vs. 40 Year Average*



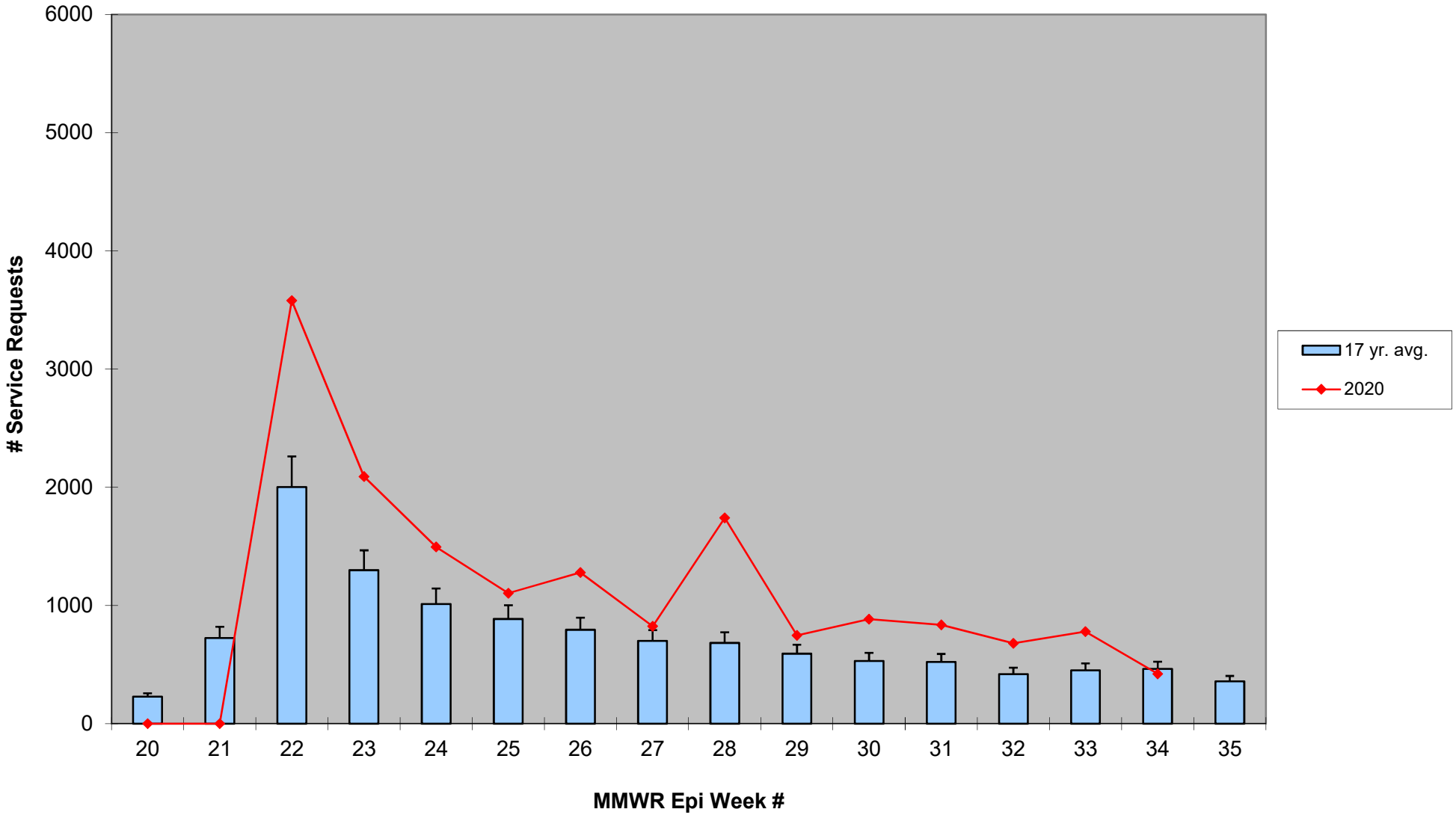
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

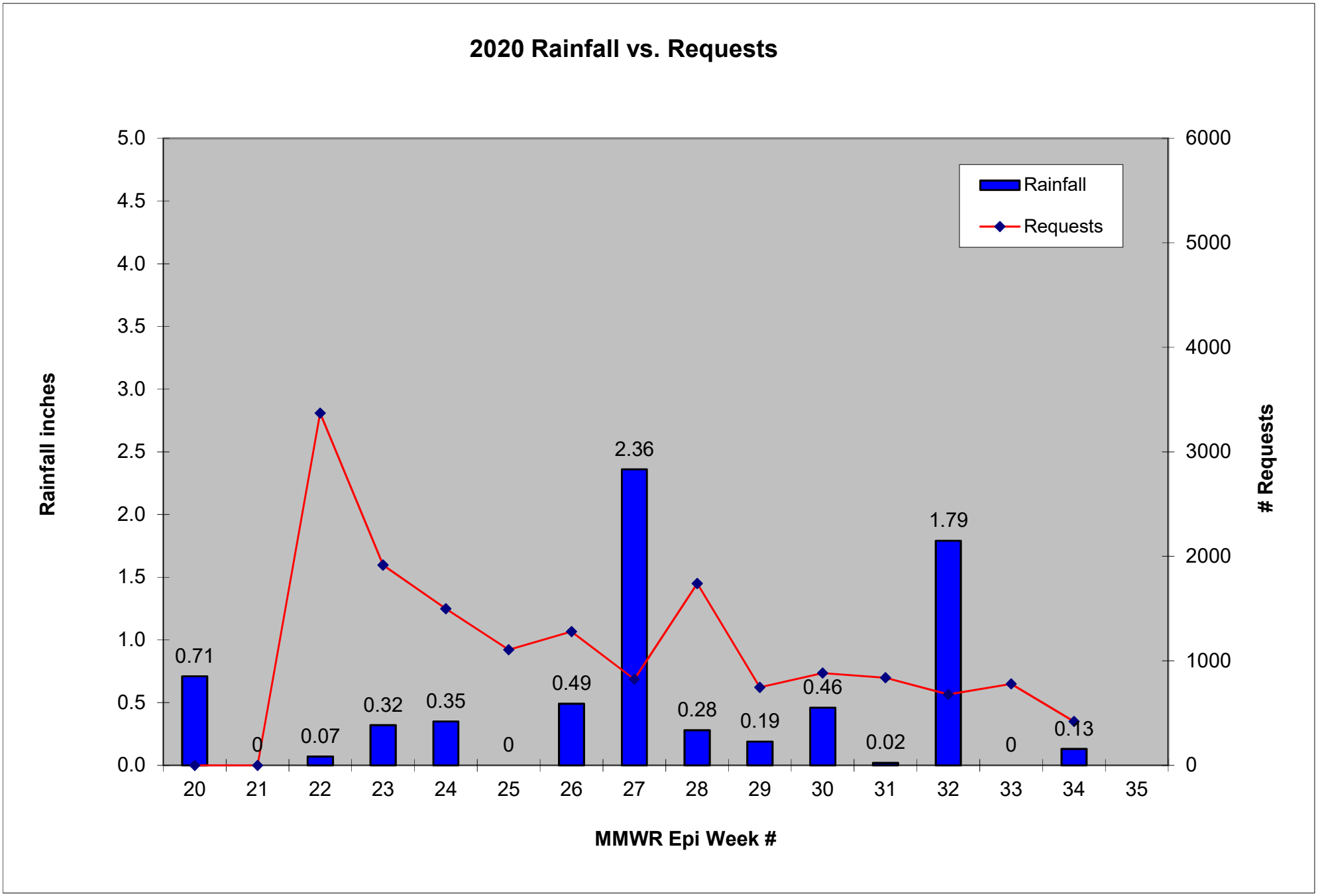
2020 CMMCP Weekly Rainfall vs. 15 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2020




2020 Rainfall vs. Requests
Rainfall inches
Requests
MMWR Epi Week #
Rainfall
Requests
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6000
5000
4000
3000
2000
1000
0
0.71
0
0.07
0.32
0.35
0
0.49
2.36
0.28
0.19
0.46
0.02
1.79
0
0.13
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35